



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,403	02/25/2002	David J. Luneau	10200-005001	3772

26161 7590 02/04/2005
FISH & RICHARDSON PC
225 FRANKLIN ST
BOSTON, MA 02110

EXAMINER

TAYLOR, BARRY W

ART UNIT PAPER NUMBER

2643

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/082,403

Applicant(s)

LUNEAU, DAVID J.

Examiner

Barry W Taylor

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-16 and 18-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-16 and 18-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 4-16 and 18-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zitting et al (6,584,148 hereinafter Zitting) in view of Pugaczewski (6,643,266).

Regarding claims 1, 16, 20 and 26.

Zitting teaches system and method for testing subscriber lines by using Remote Test Interface (see 36 figures 1 and 4). Zitting teaches the RTI detects start message sent from loop management device located at central office (see last paragraph column 8). Zitting also discloses the RTI recognizes other commands such as "open loop" and "short loop" commands (column 9) wherein "open loop" commands RTI to disconnect customer premises equipment via a terminal control device forming "open circuit" (182 figure 4, column 9). The "short loop" command is similar to "open loop" except processor controls termination device to form a "short circuit". Once open or short circuit formed, the central office may perform tests of the open or short circuit. Zitting further shows "generate signal" command may be sent by central office to RTI indicating that signal is to be generated by RTI enabling for insertion loss of cable connecting

central office and CPE (column 10). Zitting teaches using "start test" signal sent from central office (see step 212 figure 5, columns 10-11).

According to Applicant's, Zitting fails to teach reflection back of test signals (see paper dated 9/10/2004, page 11 lines 15-16).

Pugaczewski teaches a method for qualifying a loop for DSL service (Title, abstract) wherein a modem (see computer 42 figure 3A) sends test signal down line (see line 44 figure 3A) and the reflected signals are received and processed by the computer thereby determining if local loop can support DSL services. Pugaczewski discloses testing that includes signal to noise ratio, return loss, or frequency scanning (col. 5 lines 39-48, col. 6 lines 11-19).

Therefore, it would have been obvious for any one of ordinary skill in the art at the time the invention was made to utilize the teachings of Pugaczewski into the teachings of Zitting for the benefit of determining if subscriber loop can support DSL services based on reflected signals.

Regarding claim 4. Pugaczewski teaches using TERMINATION CONTROL DEVICE (see item 182 figure 4).

Regarding claim 5. Zitting teaches processor located at Central Office (see item 116 figure 3).

Regarding claims 6-7. Zitting teaches using "length of time" to be used as test duration (col. 9 line 64).

Regarding claim 8. Zitting teaches the RTI detects start message sent from loop management device located at central office (see last paragraph column 8). Zitting further discloses the RTI recognizes other commands such as "open loop" and "short loop" commands (column 9) wherein "open loop" commands RTI to disconnect customer premises equipment via a terminal control device forming "open circuit" (182 figure 4, column 9). The "short loop" command is similar to "open loop" except processor controls termination device to form a "short circuit". Once open or short circuit formed, the central office may perform tests of the open or short circuit. Zitting further shows "generate signal" command may be sent by central office to RTI indicating that signal is to be generated by RTI enabling for insertion loss of cable connecting central office and CPE (column 10). Zitting teaches using "start test" signal sent from central office (see step 212 figure 5, columns 10-11).

Regarding claims 9-15. Zitting teaches using voltage detector for testing (see 120 figure 3, col. 7 lines 5-24, col. 11 lines 39-65).

Regarding claim 18. Zitting teaches plurality of modem signals may be used (col. 8 lines 61-63, col. 10 lines 10-24).

Regarding claim 19. Pugaczewski teaches return loss measurements (col. 5 lines 39-48).

Regarding claims 21 and 27. Zitting also shows the remote test interface (see 36 figure 1) at CPE. Bleile also shows subscriber line having variety of telephony devices connected thereto (see figure 1).

Regarding claim 22-25 and 28-31. Zitting teaches modem (see 116 figure 3).

Response to Arguments

2. Applicant's arguments with respect to claims 1, 16, 20 and 26 have been considered but are moot in view of the new ground(s) of rejection.

3. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872 9314,

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121
Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor, telephone number (703) 305-4811, who is available Monday-Friday, 6:30am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached at (703) 305-4708. The facsimile phone number for this group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (703) 305-4750, the 2600 Customer Service telephone number is (703) 306-0377.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Barry W. Taylor
Patent Examiner
Technology Center 2600